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| **Bug ID** | **Description of Bug** | **Location of Bug (file, class, method, etc)** | **Steps to Recreate Bug and/or Test Case #** | **Root Cause Analysis Notes** |
| 1 | testIRVMajorityPopularVote() method of TestIRV class (a unit test) fails assertion when run 1/50,000 times | TestIRV.java | Run at least 50,000 times | The order of ballot reallocation is different as some candidates are eliminated randomly due to the same number of votes. Because of this the expected audit file does not match the produced one. |
| 2 | testIRVOneVote() method fails assertion 1/50,000 times | TestIRV.java | Run at least 50,000 | Will need further investigation |
| 3 | No fail safes for errors in input/output | Auditor and Driver | Have a system failure during a read or write to a file | Have no implementation of exception catching |
| 4 | When an exception occurs in the main thread running our program, the GUI keeps running. | Mariahgui | Cause an exception in the main thread | The GUI has no exception handling to close out of it |